

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: "William B. Ross" <billross@txdirect.net>
Subject: Re: 100V Bal. Mod. Diodes
Message-ID: <328BF236.2A90@txdirect.net>

Bill,

I had this same problem with the last 100V I owned. I replaced the entire bridge with Shotkey (hot carrier) diodes. Their excpetionally high front to back and high back resistance made them beautiful for such service. They worked like a champ.

Bill K5LLK

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Cal Eustaquio N6KYR <ceustaqu@dot.w6bhz.calpoly.edu>
Subject: 32-V2 restoration
Message-ID: <Pine.SUN.3.91.961115073502.16627A-1000000@dot.w6bhz.calpoly.edu>

Hi folks:

After nearly two years of procrastination and excuses, I finally looked the monster in the eye and got to work.

I started the restoration almost two weeks ago (since I also made this into my senior project) and began doing extensive photography of the process and documenting everything I'm doing (since the manual doesn't tell you a lot of things!).

I broke the xmtr into its component subchassis (there are five of them), and the front panel. The front panel is undergoing serious restoration at this point. I'm concurrently working on the power supply, having replaced the l.v. xfmr with a Peter "Dollars" replacement. Fits like the proverbial glove! I had to clean up a lot of the tar potting that ooze out of the original. Whole procedure took me an entire afternoon, including the rewiring. Now I have to replace the busted up barrier strips found in the back. Once the power supply is done, I have my sights set on the speech amp/modulator section. The old mic connector has been long gone replaced by some odd 4 pin connect, the likes I've never seen. Luckily, my scrounging turned up the original Amphenol 2-pin mic socket so the thing will look NOS when I'm done.

Oh yes, the front panel! Remember that odd mic connector I told you about? Seems as tho' sometimes in its past, so "technical" sculpted out a 1/16" relief to put that connector in. I had to do some tricks (pvc piping an a bit of JB Weld) to fix that portion up. I also used JB weld to patch up some "U-A" holes. A body and fender shop agreed to sand down

the panel for me. Meanwhile, I have some primer (the good stuff), wrinkle paint, and St. James Grey awaiting. No silk screening here. Too hard to get. I studied what else to do and seems like the dry xfer lettering will do quite nicely! Stay tuned. Cal. N6KYR AMI #537.

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: George Humphrey <gah@koyote.com>
Subject: 51S-1 Power Supply
Message-ID: <199611150502.XAA27609@mail.koyote.com>

BAers, let's try this again.

The last time I asked this question I didn't have near enough information about what I was asking. My boss has a 51S-1, not known if it is a -1, -1A, -1F or -1AF and it has a blank spot inside where the power supply module apparently is supposed to be. This module looks to contain T6, a 115/230VAC primary with secondary outputs of 160VDC, -30VDC, and 25.2VAC. I suppose that this module is removable to allow the installation of the optional 28VDC Power Supply that converts the 51S-1 to the 51S-1A.

Does anyone have any idea where I might find this power supply module in the 115VAC configuration? I hope I have correctly answered the questions I got the last time I posted for this supply. If not, try me again. I promise I am trainable.

73 George KC5WBV
gah@koyote.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: Glenn Finerman <GFINER@nms.com>
Subject: 75A-3 Main tuning knob
Message-ID: <s28c9537.037@nms.com>

A while ago I posted a request for a main tuning knob for a Collins 75A-3. The one that came with the receiver was trashed. (the seller said it "had a chip missing" HA!! HA!!)
Asked for Junkers?....parts units?... It's the same knob that's used on the 51J-4, R-388, etc.. Didn't get any responses.....Well, it pays to study your Fair Radio catalog!!, on page 27....."2-3/8" dia Fluted Knob with 3" dia. skirt for 1/4" shaft...Part number KNB-51J3" A mere \$5.00 !!
New!!
Ya gotta love those guys!!

PS, I also ordered 2 Collins mechanical filters (8kc) for installation in

my 75A-3 and 75A-4.....cheap! only \$27.00 each!!

FAIR TO THE RESCUE!!!

73.....Glenn N2BJG gfiner@nms.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Additional comments on crystal etching and safety
Message-ID: <Pine.ULT.3.91.961115151908.8760A-100000@dua150.kpt.emn.com>

On Fri, 15 Nov 1996, Larry Kayser, va3lk / wa3zia, brings up some important points for those considering crystal etching:

> I have a small point to add on the issue of using hydrofluoric acid in the
> etching of quartz crystals blanks. The first point is to that extensive
> etching to move a long way as Barry suggest is inappropriate. He adds that
> the acid attacks the edges with vigour, intuitively I can agree but I had
> never recognized this fact, there is however another problem. The acid does
> not seem to uniformly etch the surface of the crystal.

> My experience is that the remaining blank, after etching, may have up to a
> 1/1000 of an inch bias in thickness with just moving in the order of 5 khz
> or so. I have one sense of the cause of this problem might be the need to
> agitate the crystal in the etchant. My work has not solved this problem...

The etching solution attacks the crystal at both (or all three) sides when you have sharp edges. The result is that the edges dissolve faster and eventually the crystal will wind up with rounded edges. This is the primary effect that causes problems. However, there is a secondary effect that partially explains the nonuniformity Larry describes. I don't pretend to understand all of the thermodynamics involved but the surface energies of a crystal are less as the crystal gets smaller. The result is that while the entire crystal surface goes into solution, thinner sections do so faster. This would lead to a "bulging" of the crystal in the middle of each face.

However, I think Larry is describing something more than this. His suggestion for agitation is excellent. Mass transfer effects will cause local concentration gradients and hence different rates of the quartz dissolving. One thing that will help is to use a slightly stronger concentration of hydrofluoric acid (remember, DANGEROUS). Agitation will help too. I guess I have usually been lucky due to my impatience. I frequently remove the crystal to test it and place it back in the etchant a number of times which tends to randomize the orientation of the crystal. So sometimes my ignorance CAN be helpful after all!

By the way, do not lay the crystal flat on the bottom of your plastic etching container. Prop it up vertically if possible.

I am glad Larry brought this up and it should serve to reinforce the idea that etching may be OK for very _small_ swings up in frequency and as a crystal cleaning method, but good old-fashioned grinding is what most of us should stick with - and it is safer. Thanks, Larry.

I would also like to thank Jim, W8ZR, for his safety warnings.

> I don't want to sound like your mom, but I'd recommend nobody except
> professionals mess with hydrofluoric acid. It's some of the nastiest stuff
> in the world.

<gruesome story deleted, I cannot vouch for its authenticity, but it makes scientific sense>

Who cares if you sound like our mom, Jim? Mom was usually right and she was always thinking about our safety. I owe a lot to some of my Elmers of years ago in regard to electrical safety - things like keeping one hand in your pocket, never working on live equipment when tired or sleepy. I know these things are printed in every handbook and everyone can read them. However it means a lot more when they are demonstrated by someone older and wiser. Well, 32 years later, I guess I now fall into the same category I once thought of my Elmers. I think most of the Boatanchor folks fall into this category too - we get to be the Elmers of the next generation. This means we should try to demonstrate the best and safest ways of doing things. Good operating skills and politeness while "on the air" are also something we can pass on.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: harlan@aciss2.ENET.dec.com
Subject: ARC58 Manual Updates???
Message-ID: <9611151941.AA21114@us2rmc.zko.dec.com>

Hello All, 15-Nov-1996 14:43 EST

Would anyone happen to have an ARC58
manual that is a newer flavor than my T.O. 12R2-2ARC58-2 ?

My ARC58 manual appears to be a 'Fair Radio'
reproduction and although very applicable to my radio, its

missing "section 13: Difference Data Sheets". The Subassembly in question is the CV465B/URC in my radio. My manual only has info on the Master oscillator unit CV465/URC. They are two different beasts indeed. From the informative sentence contained on the section cover sheet, I guess repair and alignment info on later revision subassemblies should be in 'Section 13'. Or perhaps just a newer manual would contain information on the CV465B/URC Master Oscillator Assembly.

TIA Dan Harlan N8ETQ
Cleveland, SNOW-HIGH-OH

Harlan@aciss2.enet.dec.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Bob Ragain, 303-470-2534, RAGAIN@SEDALIA.OMNES.SLB.COM"
<RAGAIN@hubvx6.sedalia.wireline.slb.com>
Subject: Arcing SB-230 amp
Message-ID: <961115144728.25062444@hubvx6.sedalia.wireline.slb.com>

Ye Gurus of high-powered firebottles,

The RF shack in the local Red Cross office has a Heath SB-230 amp which uses an 8873 conduction cooled RF amp tube. The amp, or more specifically, the tube, has a serious problem. Occasionally the grid bypass capacitors blow (and I mean "really" blow, ka-pow) when attempting to operate the amp. Seems that the grid capacitors are getting HV on them. It didn't take many changes of capacitors (and a few articles of clothing) to make us decide not to replace the caps again.

What's going on here? Are 8873's bad about developing plate to grid shorts or what? With the price of a new tube at around \$400, replacement will never happen.

Can a power tube be hi-potted with a "Megger" to verify this failure? What could cause this, improper element position inside the tube, a gassy tube?

Any tube swaps or SB-230 rebuilds to use other tubes that anyone could recommend?

Anyone have an 8873 just laying around awaiting an IRS deduction for donation to the American Red Cross?

Thanks for any help,

Bob

Bob Ragain WB4ETT Littleton, CO

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: mirage!pamars@uucp-1.csn.net (P.A.Marshall)
Subject: BAs' at Fort Wayne (update)
Message-ID: <9611151859.AA19416@mirage>

Gang, the table list for BA list members just gained one more:

Jack N9GT & Mike KB9VU L-202 (Old lower level)
Chuck W8GFA L-003 & 004
Rich W5VDU L-028
Tony N8SNC R-075

See 'ya all tomorrow.

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: mirage!pamars@uucp-1.csn.net (P.A.Marshall)
Subject: BAs' at Fort Wayne fest
Message-ID: <9611151246.AA18827@mirage>

Gang, the table list for BA list members:

Jack N9GT & Mike KB9VU L-202 (Old lower level)
Chuck W8GFA L-003 & 004
Tony N8SNC R-075

Also heard from some other list members who plan on wandering
around and snapping up all the bargains ;-)

Al Marshall "Real Radios Glow in the Dark" almarshall@acm.org
1+219.665.5072 Mirage Computers, Inc. pamars@mirage.angola.in.us

"The lyf so short, the craft so long to lerne." - Chaucer

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Lynn D. Stolz" <lynn@midohio.net>
Subject: BC-221 as a VFO
Message-ID: <328C9104.4ED1@midohio.net>

Gang,

Has anyone ever tried using a BC-221 as a VFO to drive their old crystal controlled rigs? I'd like to know if it's possible. The '221s seem to have plenty of output. Any suggestion as to how to implement this is appreciated.

Lynn N8AJ

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: John Kolb <jlkolb@cts.com>
Subject: Re: BC-221 as a VFO
Message-ID: <Pine.SCO.3.91.961115075950.25024B-100000@sd.cts.com>

On Fri, 15 Nov 1996, Lynn D. Stolz wrote:

> Gang,
>
> Has anyone ever tried using a BC-221 as a VFO to drive their old crystal
> controlled rigs? I'd like to know if it's possible. The '221s seem to
> have plenty of output. Any suggestion as to how to implement this is
> appreciated.

The BC-221 (or LM) does not have a sine wave output, but a distorted signal with lots of harmonics - on purpose so you have all those other freqs listed in the calibration book. Therefore you should filter it with a resonant LC circuit or bandpass filter to limit it to the desired band of operation.

John KK6IL

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: jproc@bellglobal.com
Subject: RE: BC-221 as a VFO
Message-ID: <Chameleon.4.01.2.961115005803.jproc@>

>Has anyone ever tried using a BC-221 as a VFO to drive their old crystal
>controlled rigs?

Lynn,

Yes, it should be possible.

Aboard ship, I've got a frequency shift keyer (FSK) plugged into a crystal socket of the PV500 HM transmitter and the oscillator tube has been pulled out of the circuit. In essence, I feeding the RF directly to the input

of the buffer stage. The FSK has three crystal controlled positions but its output can be perceived as a 'fixed' VFO. This was my specific solution for a non-destructive and reversible modification. Later models of the PV500 supported an FSK input.

I have not personally tried using a VFO directly in place of a crystal, but please note that one side of the BC221 RF output is grounded. You must ensure that this ground is not propagated to the wrong point in the oscillator circuit. A Pierce oscillator would be an example of where this technique would likely not work.

A better way, would be to feed the output of the BC221 through a coupling capacitor directly to the input of the buffer stage and pull the oscillator tube out of the circuit. The value of the coupling capacitor can be the same value as the existing capacitor which couples the oscillator stage to the buffer stage. It's something worth experimenting with.

I had thought of using the BC221 technique to give the 4 channel, crystal controlled, RCK receiver continuous tuning capability but I had totally forgotten about it. In my files, I have an modification from a 1966 issue of CQ magazine that will give the RCK continuous tuning capability. Since the RCK that I have is factory original, I do not wish to modify it in any way. Maybe I will give the BC221 a try next year. Thanks for reviving the idea.

Anyway...those are my thoughts.

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com
Radio Restoration Volunteer
HMCS Haida Naval Museum
Toronto, Ontario

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "David L. Thompson" <thompson@mindspring.com>
Subject: RE: BC-221 as a VFO
Message-ID: <199611152041.PAA23501@answerman.mindspring.com>

2:38 PM 11/15/96 -0600, Lynn wrote:

>>Has anyone ever tried using a BC-221 as a VFO to drive their old crystal
>>controlled rigs?

>

The ultimate article on using the BC221 as a VFO was in QST, March 1947 starting on page 43.

This article shows how to use the BC221 and even builds a 3 watt exciter which is probably not needed for most of the small ham rigs. Should work great with old SSB rigs like the 10B or 20A too. (maybe I need to try it with my Babcock MT-5B mobile transmitter, circa 1955).

We used the BC221 to lower the HQ110 to cover 3289Khz Army Mars. Just attached it to the variable cap and set up a frequency chart translation.

Dave K4JRB

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Conard Murray <conard@tntech.campus.mci.net>
Subject: BC-312M offered for ???
Message-ID: <1.5.4.32.19961115092203.006914e4@tntech.campus.mci.net>

Greetings boatperson,
I have a BC-312M that I want to see going somewhere else where it can get some use. This one works OK, but the dynamotor is gone so it runs on a seperate AC supply. The BFO switch was replaced by me with a modern small toggle switch as the original went open and it must have been a custom part. Otherwise, it is pretty much original looking. This would be a great first BA or just a good set to tinker with.
I am open to offers and/or trades for whatever. I would really like to find a pair of 811's or some such tube for a homebrew project.
Thanks and 73,
de Conard ws4s

Conard Murray	WS4S	NNNOUTN	Glowbugs Listowner
217 Dyer Avenue			BA/GB net 1802.5/3579.5/7050 KHz
Cookeville, Tn	38501		conard@tntech.campus.mci.net
615-526-4093			Wise men still seek Him

- LICENSED ONLY TO EXTENT INDICATED ON CARTON -

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: "William B. Ross" <billross@txdirect.net>
Subject: Re: BC610 question
Message-ID: <328BFA8E.4918@txdirect.net>

Gordon Smith wrote:

>
> I have seen lots of postings concerning BC610's lately. I admit
> a level of ignorance to military gear. What's a BC610? What's a
> BC610 tuning unit?
>
> I've seen a really rugged looking antenna tuning unit with two
> levers for roller inductors, and a switch or two. It was probably
> 18 inches high X 12 inches wide X 20 inches deep (or so).
>
> If that's not a BC610 tuner, does anyone know what it might be?
> Thanks for any info on it, because I think I'd like one of those
> to use with my old tube xmtr. 73
> WA9SLU WPE9IJX 1983 Honda GL650 Silverwing
> Regards from the "Silicon Flood Plain" (tm) of Kokomo, In.
> (home of Delco Electronics and the "Steer and the Stump"
> ask me if you want more info :))
> glsmith@holli.com

Gordon,

The BC610 was a military version of the Halli HT4 transmitter and was used during WWII and Korea. It was distributed in various models through the BC610-I. It was replaced by a more modern transmitter in the 60s called the T368.

The 610 was a high powered transmitter consisting of a 250TH modulated by a pair of 100TH triodes. It was capable of 250 watts AM and 400 watts CW and RTTY from 1.5 through 18 Mhz. The tuner you described appears to be the 939 tuning unit which sat on top of it.

The 610 was most commonly seen as a part of the ANGRC26 shelter mounted communication system designed to be mounted on the bed of a 2-1/2 ton truck which pulled a 10KW jeep engine powered generator, The PE95. The ANGRC26 included the BC610, 939 tuning unit, a master oscillator with frequency shift mode, a speech amplifier, RTTY receiving converter, RTTY tape reader and perforator and a pair of general coverage receivers. The first receivers were Super Pros and HROs which evolved through the Halli SX71 and Ham SP600 (both known as the R274), the Collins R388 (often called the 51J3), R390 and later the R390A although these last two were teamed with the T368 transmitter.

The BC610 had a 3 channel input in that it was possible to move between three preset frequencies quickly by switching between one of three tuning units which controlled the frequency either via the master oscillator, crystal, or their own internal oscillator. These plug-in tuning units came in five models each covering a limited frequency range.

The output of the BC610 was a single ended plug in coil which was link coupled to the antenna. As with the tuning units, there were numerous coils, each covering a specific frequency range.

I hope I have answered all your quextions.

Bill K5LLK

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: john <johnmb@pop.mindspring.com>
Subject: Bonehead .sig file, wants, and BA Web Page
Message-ID: <199611152228.RAA14759@answerman.mindspring.com>

I've been made aware that thanks to the help of a Eudora mail crash, and my subsequent misguided repair strategy, my last few posts have been sent with my OLD sig file. My correct address is in the header, and I hope the right .sig file appears below.

I'm still looking for Lysco, Eby, Gross and other odd and off-beat ham transmitters from the 30's-60's. If you would like some Christmas cash and would like such a rig to go to a good home, please write me.

The correct URL for my Boatanchors web page is:

<http://www.mindspring.com/~johnmb/>

Have fun! Dick Dillmans fine BA collection will be loaded this weekend!

Best 73
/John

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+-----+
|John Brewer johnmb@mindspring.com          |
|WB50AU/4             AMI #24                |
|Vintage Gear web page: http://www.mindspring.com/~johnmb/|
+-----+
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From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Chemical Safety and Boatanchors
Message-ID: <Pine.ULT.3.91.961115160550.8760B-1000000@dua150.kpt.emn.com>

On Fri, 15 Nov 1996, Kalman Laudon, W2ES, wrote:

> I am very happy that knowledgeable folks like Barry have taken the
> job of being boatanchors list chemistry experts, and particularly,

> chemical safety experts.

>

> At least 3 years ago, I posted some warnings when folks began to speak
> about constructing homemade vapor degreasers, for home hobby use. At the
> time, I was lambasted publically, lumped in with a mythical class of
> villians called "chemophobes", and was openly insulted by a reference
> to my e-mail address as being one which ought to have indicated some degree
> of scientific knowledge (which the writer implied that I did not have,
> judging from my comments and obvious "phobia"). In fact, that epithet
> was invoked again just recently (although not directed at anything I
> had posted).

>

> I did not respond publically to these insults at the time, or in the
> several years since, because the awareness that I had intended to
> cause, did indeed arise! A knowledgeable expert did indeed arise and
> assume the role that I had intended to create (not necessarily fill
> myself).

>

> My ego is not important here. Helping one's fellow to avoid injury,
> and to achieve happiness in his life, is.

I quoted this entire section because I would like to publically thank Kalman for his kind words. I do not consider myself an expert on this subject. I do work in the research labs of Eastman Chemical Company, one of the worlds larger chemical companies, and because of this have access to a good library, lots of safety information, and an online MSDS search. As I have stated many times - I ARE NOT A CHEMIST, I ARE A ENGINEER (ChE/EE). However, I again agree that helping other Boatanchor fans do things safely is a constructive use of some of my free time. Like Kalman, I too found some of the suggested practices to be highly dangerous, and since Boatanchor restoration exposes us to more chemicals than the average ham, it was certainly worth debunking some of the misinformation.

It is extremely common to run into "chemophobia" everyday. The best way to fight this is with good information. Knowledge and fact can usually beat most irrational fears.

> I maintain to this very day, that insufficient awareness of chemical
> safety (that is, true chemical safety, not enviro-nazi-politically-
> correct chemical safety) is still a problem among some tinkerers.

I agree, but I also believe the folks on Boatanchors are probably more knowledgeable than the average ham or tinkerer and are thus more safety concious. However, even if it sounds like Mom, some extra warnings never hurts. As I mentioned in an earlier post, we are the new generation of Elmers. We should do our part by educating the newcomers and demonstrating the safe way to do things.

> I am very pleased that we have the proper expert advice on this list,
> and I feel strongly that my initial wake-up call is what got that
> expertise to be shared openly. Lots of folks ask questions about
> chemicals and materials, and info is provided.

As I said before, I feel a little uncomfortable being called an expert here. We are all experts in our own way, I guess. I do remember Kalman's advice on solvents and I remember some of the flak he took from those ignorant of the subject. It was totally undeserved and hopefully we have a wiser bunch of Boatanchors folks today. I hope no one feels stupid by asking questions. How else can you learn? I know we need to keep to the subject of Boatanchors on this list, but thankfully Jack Hill has never complained about safety messages here. Boatanchors is a place to share information after all and it is filled with some of the finest and wisest people I have had the pleasure to meet, either in person, on the air, or over the keyboard. [Of course, some of us, especially me, are real eccentrics!]

I hope everyone read the stories Kalman wrote on safety. They ARE important.

Heck, I even convinced my wife to wear steel-toed safety boots and safety glasses when she mows the yard!

[Actually convincing her to wear the safety equipment was trivial compared to what I had to do to get her to do the mowing!]

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: bsheck@NIMUE.HOOD.EDU (Bob Sheck)
Subject: Re: Chemical Safety and Boatanchors
Message-ID: <01IBVRPN5PKY0015DE@NIMUE.HOOD.EDU>

At 15:43 11/15/96 -0600, u856010@eastman.com wrote:

>On Fri, 15 Nov 1996, Kalman Laudon, W2ES, wrote:

<<SNIP>>

>I agree, but I also believe the folks on Boatanchors are probably more
>knowledgeable than the average ham or tinkerer and are thus more safety
>conscious. However, even if it sounds like Mom, some extra warnings never
>hurts. As I mentioned in an earlier post, we are the new generation of
>Elmers. We should do our part by educating the newcomers and
>demonstrating the safe way to do things.

<<SNIP>>

I heartily agree. There's no way we will ever know how many folks have developed evil, often fatal diseases due to their inadvertant exposure to

lethal chemicals either by ignorance or negligence.

We can't stress this enough, or any other safety issues.

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "E. V. Sandy Blaize, W5TVW" <ebjr@worldnet.att.net>
Subject: Re: Chemical Safety and Boatanchors
Message-ID: <19961115221700.AAA23181@LOCALNAME>

At 09:43 PM 11/15/96 +0000, you wrote:

>As I said before, I feel a little uncomfortable being called an expert
>here. We are all experts in our own way, I guess. I do remember Kalman's
>advice on solvents and I remember some of the flak he took from those
>ignorant of the subject. It was totally undeserved and hopefully we have
>a wiser bunch of Boatanchor folks today. I hope no one feels stupid by
>asking questions. How else can you learn? I know we need to keep to the
>subject of Boatanchors on this list, but thankfully Jack Hill has never
>complained about safety messages here. Boatanchors is a place to share
>information after all and it is filled with some of the finest and wisest
>people I have had the pleasure to meet, either in person, on the air, or
>over the keyboard. [Of course, some of us, especially me, are real
>eccentrics!]
>
>

BRAVO! I have learned to almost *hate* the title "expert"! Almost anyone who refers to himself as an "expert" is generally a: 'if you can't dazzle them with brilliance, baffle them with bull s**t!' type. Knowledge seems to be an ever expanding universe. You never get to the edge of it! The more you know, the more you learn you don't know! Or should I say the smarter you get the more you find out just how stupid you are!

I taught a few classes in 'amateur theory' quite a few years ago. When your students ask questions, especially ones you can't immediately answer, it is a learning process for all! When they don't ask questions is when you "worry" if you are getting any of the material across. I have had Novice class students ask some questions that made me do a few hours of research to answer. When you are the "Elmer" it's sometime tough to keep ahead of the students!

The short of it: Sandy's axiom nr.3: "There ain't no such thing as an 'expert'"

73,

E. V. Sandy Blaize, W5TVW

"Boat Anchors collected, restored, repaired, traded and used!"

417 Ridgewood Drive,

Metairie, LA., 70001

ebjr@worldnet.att.net

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Edward J. Zeranski" <ejz@nosc.mil>
Subject: Re: Chemical Safety and Boatanchors
Message-ID: <2.2.32.19961115231942.00dd61ac@marlin.nosc.mil>

At 15:42 11/15/96 -0600, you wrote:

>On Fri, 15 Nov 1996, Kalman Laudon, W2ES, wrote:

>

>> I am very happy that knowledgeable folks like Barry have taken the
>> job of being boatanchors list chemistry experts, and particularly,
>> chemical safety experts.

Always glad to hear from folks with this kind of experience! I wish that was available back when we used to rinse off the cooling oil(PCB madness)with trico or industrial freon then dry the shop towels with a heat gun.

Ed Zeranski ejz@marlin.nosc.mil, work
 ezeran@cris.com home
Wooden Boats, Tube Receivers, Rusty Old Trucks, The Good Stuff!

This is a private opinion or statement and is nobody's fault but mine. No person, employer, or govt. should try to take credit for it!

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: JOHN_SEHRING.parti@ecunet.org
Subject: CRT PHOSPHOR PERSISTANCE NUMBERS
Message-ID: <9611141907.aa10228@pcusa01.ecunet.org>

Might anybody know exactly what the various P*'s on the end of CRT designations mean, e.g. 5ADP7?

Seems to me it's phosphor persistence. I've seen P1, 2, 4, 7, and 11. Have seen green and blue (long persistence) colors.

-John Sehring (11/14/96 10:21 am MT @Baker, Montana) UCC wb2eqg

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996

From: "James C. Owen, III" <owen@apollo.eeel.nist.gov>
Subject: RE: CRT PHOSPHOR PERSISTANCE NUMBERS
Message-ID: <38147.owen@apollo.eeel.nist.gov>

In message Fri, 15 Nov 1996 01:18:59 -0600 (CST),
JOHN_SEHRING.parti@ecunet.org writes:

> To: boatanchors@theporch.com
>
> Might anybody know exactly what the various P*'s on the end of CRT
> designations mean, e.g. 5ADP7?

P1	Green	Medium Persistence	
P2	Blue-Green	Medium Persistence	
P4	White	Medium Persistence	
P5	Blue	Very Short Persistence	
P7	Blue-White	Short Yellow Long Persistence	*Radar indicators
P11	Blue	Short Persistence	
P12	Orange	Long Persistence	*Radar Indicators

Hope this helps. 73 Jim K4CGY

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "August H. Johnson" <kg7bz@whitemtns.com>
Subject: Re: CRT PHOSPHOR PERSISTANCE NUMBERS
Message-ID: <328C8F2B.3E32@whitemtns.com>

JOHN_SEHRING.parti@ecunet.org wrote:

>
> To: boatanchors@theporch.com
>
> Might anybody know exactly what the various P*'s on the end of CRT
> designations mean, e.g. 5ADP7?

This is from the chapter on CRT's from a book on Vacuum Tubes that I
copied many years ago. I don't remember the title of the book.

Table D-4 Cathode-Ray-Tube Screen Characteristics

Characteristic	Screen designation (see note 20)								
	See note	P1	P2	P3	P4	P5	P6	P7	
Number of Layers	21	1	1	1	1	1	1	2	
Luminescence	22	G	LBG	LGY	W	LV	W	BW	
Main Peak wavelength		5250	5140	5500	4500	4300	4400	4400	

Phosphorescence	23	G	LBG	LGY	W		LV	LV	LY
Main Peak Wavelength									5600
Tenebrescence	24								
Main Peak Wavelength									
Persistence, sec. (to 1% of peak)	25	0.05	0.5	0.06	0.06		10-4	.005	3.0
Decay type	26	e-t	t-n	e-t	e-t,t-n	t-n	t-n	t-n	
Rel. lum. efficiency (P1 = 100%)		100	135	84	80		6	150	
Minumum anode V.	27	500	1000	500	500		500	500	4000
Principal use	28	0,R	L,R	0,T	T		P	C,T	R,L

		Screen designation (see note 20)							
Characteristic	See	-----							
	note	P10	P11	P12	P13	P14			

Number of Layers	21	1		1	1		2
Luminescence	22			LB	LO	LR	PW
Main Peak wavelength				4580	5870	6740	4400
Phosphorescence	23			LB	LO	LR	LO
Main Peak Wavelength							6090
Tenebrescence	24	M					
Main Peak Wavelength		5570					
Persistence, sec. (to 1% of peak)	25	10 to 100	.005	0.4	0.1	1.0	
Decay type	26	t-n	t-n	e-t	e-t	t-n	
Rel. lum. efficiency (P1 = 100%)			72	90	5		
Minumum anode V.	27	9000	500	4000	4000	4000	
Principal use	28	R,L	P	R	D,R	D,R,L	

Note 20: Cathode-ray-tube screen properties. "P" numbers (P1, P2, P7, etc.) are RMA assigned numbers and are reasonably uniform among manufacturers. This table is of necessity brief and incomplete and is intended to convey only partially the differences between the various screen materials and the requirements for satisfactory operation.

Note 21: Two-layer screens are referred to as "cascade" types. These have two adjacent layers of different phosphors. The P10 is an evaporated screen and is not used as a phosphor. See also Note 24.

Note 22: Luminescent color is the color of the light emitted by the screen during excitation
by the electron beam. V = violet, B = blue, G = Green, Y = yellow, O = orange, R = red, P = purple, W = white, and L = light, or pale.

Note 23: Phosphorent color is the color of the light emitted by the screen material after cessation of electron excitation.

Note 24: Tenebrescent color is the color of the darkening of the screen material due to excitation by the electron beam. Cathode-ray tubes having tenebrescent screens are intended to be viewed by reflected light. The color of a fresh trace is magenta (M).

Note 25: The approximate time in seconds to decay to 1 per cent of the peak excitation is given. Values may vary considerably from those given since they depend on current density used, especially in the case of phosphors that have a t-n type of decay.

Note 26: Screens are listed as following an exponential (e-t) or power-law (t-n) decay if the approximate behavior over the interval of time usually associated with the use of the screen is either exponential or power-law in form. No simple statement will adequately describe the complete decay characteristics of the screen.

Note 27: Minimum anode voltage in the minimum recommended anode voltage at which reasonably satisfactory performance will be attained.

Note 28: There are obviously other uses than the customary ones indicated by the following symbols: C, color television; D, dark adaption retention; L, transient oscillograph; O, oscillograph or general purpose; P, photographic oscillograph and high-speed scanning; R, radar; T, television.

--

August Johnson KG7BZ AMI 733 <http://www.whitemtns.com/~kg7bz>
P.O. Box 795
Pinetop, AZ 85935

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: "Barry L. Ornitz" <u856010@eastman.com>
Subject: Crystal Etching and Ammonium Bifluoride
Message-ID: <Pine.ULT.3.91.961114202727.2514C-1000000@dua150.kpt.emn.com>

In the following message, I have corrected all the misspelled versions of words relating to the compound fluorine. Note that this is NOT "flour-ine". Since some of the good folks on Boatanchors are into crystals too (especially Roberta who showed off some prize crystal specimens at Dayton), I thought the safety warning might be appreciated.

Jeff Duntemann wrote:

> Most intriguing is his description of crystal etching using

> ammonium bifluoride, which he describes as harmless, though
> anything with fluorine in it inspires caution in this particular
> individual.

Bob Keys replied:

> Yeah, me too.....

> This is the best way to etch xtals, but also the most dangerous.

> Ammonium bifluoride (also HF acid or HydroFluoric acid) eats human
> flesh quite well, so it needs to be handled in a fume hood, and
> with appropriate safety precautions and personal protective
> equipment. In very dilute solutions, it is not so bad, but in
> denser solutions or in the straight acid form, it can be downright
> mean stuff. I am sure Barry Ornitz can fill us in on the
> particular details here, if he has some time.

Thanks for the confidence, Bob. Let me add a little more background and then I'll try to explain things.

Roy Morgan then asked:

> I've got a small quantity of Ammonium Bifluoride from the estate
> of an SK. It is in the form of clear crystals, a bit like rock
> salt or kosher salt. It is contained in what appears to be
> polyethylene bag in a small cardboard box. It appears to not have
> changed its appearance for 30 years, and the container appears to
> not have suffered at all.

> My memory of Hydrofluoric Acid from high school is that it is a
> liquid which fumes a bit when exposed to air, and which must be
> stored in a wax-lined bottle.

> Are we talking about the same thing here!

Bob Keys replied:

> The ammonium bifluoride, dissolved into solution makes for a weak
> HF acid {chemical abbreviation for hydrofluoric acid from the
> elements Hydrogen, H, and Fluorine, F} as opposed to the 40-60% HF
> aqueous acid in the classic HF wax lined acid bottle. It is still
> the same stuff.

Ammonium bifluoride, or more properly ammonium hydrogen fluoride, is a double salt of hydrofluoric acid. Its chemical formula is NH_5F_2 (or for better understanding $\text{NH}_4\text{F}\cdot\text{HF}$ or NH_4HF_2). It differs slightly from ammonium fluoride (NH_4F). [Similarly sodium carbonate (washing soda)]

differs somewhat from sodium bicarbonate (baking soda).]

When dissolved in water, ammonium bifluoride produces a weak solution of hydrofluoric acid and ammonium fluoride. Roy's memory is correct about strong solutions of hydrofluoric acid in water - although polyolefins have been the preferred container materials for years.

>From a safety standpoint, consider hydrofluoric acid, ammonium fluoride, and ammonium bifluoride to all be dangerous and highly corrosive.

Bob continued:

> It is classed as a skin irritant, and requires 15 minutes flushing
> the skin after exposure in running water. That is not as bad as
> the concentrated HF, which is highly corrosive. HF, regardless of
> its source can "cause deep, slowly healing burns to the skin which
> may not be immediately painful." Also, "contact with the eyes may
> cause permanent blindness."

> Store in a dry, well-ventilated area. Protect containers from
> physical damage. Avoid inhalation of dust or fume. Follow good
> hygienic practice to avoid inhalation or ingestion. CONTAINERS
> SHOULD BE PLASTIC, RUBBER, WOOD, OR PARAFFIN COATED.

> Although the HF is the worst stuff, the ammonium bifluoride is the
> same stuff, in a lesser format. Use care and appropriate
> cautions, etc.

I would like to add only some minor comments here. In the presence of moisture, the salts can do as much damage as straight hydrofluoric acid. When Bob says to wash for 15 minutes - he means it! Wash under continuously running water for at least this long - and start this immediately; do not wait for help.

The list of problems that can be caused by ingestion or absorption of fluoride salts is about a page long in small type! I won't bother to list them here. One insidious problem with hydrofluoric acid and its cousins is that it immediately deadens nerve endings, so you do not feel immediate pain. Hydrofluoric acid burns are extremely slow healing because they are generally so deep. The healing process is supposed to be one of the most painful things a person can endure.

On containers, I mentioned polyolefins (polyethylene, polypropylene) as being quite resistant to attack. Most other plastics resist hydrofluoric attack too except possibly nylon. I would stay clear of wood, not because it is not resistant, but because it is porous and can absorb the acid [you do not want to handle the wood afterward].

As for using ammonium bifluoride solutions to etch crystals, Bob Keys noted:

> I tried it one time, and it works quite nicely, but takes forever,
> using ammonium bifluoride, or at least it did for me, with fairly
> dilute solution. It is a good way to reactivate xtals that are a
> bit sluggish and just need some cleanup.

I concur with Bob here. Grinding is faster, but etching is useful for "fine tuning" a crystal. When silica (SiO_2 , quartz) is placed in hydrofluoric acid, silicon tetrafluoride gas is released. This is extremely toxic too so work outdoors, or under a laboratory hood, or certainly with lots of ventilation. The amount produced is not much but it is dangerous, nevertheless. Plastic tongs or tweezers should be used to handle the crystal and wash it thoroughly in running water before handling it. Remember the cleaner the crystal, the better it will oscillate.

Something that should be considered when etching crystals is the fact that any etchant attacks the sharp edges of a crystal first. Round edges make the crystal less active. However, as Bob notes, the etching also cleans up the crystal of any left-over grinding compound or quartz dust imbedded in the surface of the crystal. In my experience, etching is good for moving a crystal up maybe 10 kHz after getting close with grinding. When doing your grinding, it is important to maintain parallel crystal faces and sharp edges. If this is done, etching to the final frequency should not harm the crystal activity.

Conard Murray added:

> It is a Clover compound but is in a grease base so you gotta clean
> the blank pretty well after each session, but if you follow the
> proper cleaning procedure then it is no added work using the
> grease base.

I have always used water-thinned grinding compounds but I see no reason oil-based compounds should not work too. But the cleaning issue is very important. Any trace of oil on the crystal (even skin oil from handling it) will reduce the crystal activity. It is probably worth using a caustic cleaner to remove any oil. A short soak in sodium hydroxide solution should work well. [Theoretically concentrated sodium hydroxide solution can etch quartz. I have found that it attacks glass slowly but that the rate of etching quartz is so slow as to not be noticed.] Remember to rinse well and dry thoroughly before putting the crystal back in its holder. Handle the crystal only by its edges.

I am quite pleased to see the activity on this (Glowbugs) group. Crystal grinding/etching is a fine old tradition. Buy some hamfest "junk"

crystals and start experimenting. You can learn plenty from at most a few dollars worth of mistakes, and when you become successful you have joined the ranks of an elite bunch of old-timers. And more importantly, think of the fun of bragging that not only did you homebrew the rig, you also ground the crystal to frequency! But be safe, however. If anyone needs a full MSDS on ammonium bifluoride, email me at the address below.

73, Barry L. Ornitz WA4VZQ ornitz@eastman.com

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: lkayser@rideau.net (Larry Kayser)
Subject: Crystal Etching and Ammonium Bifluoride, one more point
Message-ID: <199611151425.JAA03132@mail.peterboro.net>

Greetings:

I have a small point to add on the issue of using hydrofluoric acid in the etching of quartz crystals blanks. The first point is to that extensive etching to move a long way as Barry suggest is inappropriate. He adds that the acid attacks the edges with vigour, intuitively I can agree but I had never recognized this fact, there is however another problem. The acid does not seem to uniformly etch the surface of the crystal.

My experience is that the remaining blank, after etching, may have up to a 1/1000 of an inch bias in thickness with just moving in the order of 5 khz or so. I have one sense of the cause of this problem might be the need to agitate the crystal in the etchant. My work has not solved this problem...

Larry
va3lk / wa3zia

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: 4CX250B@miavx1.acs.muohio.edu
Subject: Re: Crystal Etching and Ammonium Bifluoride, one more point
Message-ID: <v03007806aeb2424e91ad@[134.53.5.143]>

>I have a small point to add on the issue of using hydrofluoric acid in the
>etching of quartz crystals blanks.

Hi Guys,

I don't want to sound like your mom, but I'd recommend nobody except professionals mess with hydrofluoric acid. It's some of the nastiest stuff

in the world. I remember reading a story years ago about someone who picked up a rag that had been moistened with HF. Infomed that the rag was contaminated, the person remarked that the HF felt slightly oily but not terribly corrosive. He then washed his hands carefully and all seemed well. A few days later he had to have both hands amputated. Don't know if the story is true or not, but I always think of it when I'm tempted to mess with the stuff.

Jim W8ZR

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Dick Dillman" <ddillman@igc.apc.org>
Subject: Custom Batteries
Message-ID: <52331.ddillman@igc.apc.org>

Perhaps most keepers of battery operated military BAs are aware of this outfit, but just in case I thought I'd post this information for those who might need it. I ran across them when I was looking for B batteries for my BC-611s (they had 'em avilable).

Bren-Tronics has in stock or will make batteries for most military radios, BA or otherwise, that meet original specs. For a price, of course. They may be contacted at:

Bren-Tronics, Inc
Michael Roamer, VP Marketing
10 Brayton Court
Commack, NY 11725
Phone: 516-499-5155
Fax : 516-499-5504

Dick Dillman
WPE2VT W6AWO ex-N6VS
<ddillman@igc.apc.org>
Collector of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Edward J. Zeranski" <ejz@nosc.mil>
Subject: Custom/Mil Batteries
Message-ID: <2.2.32.19961115233539.00de8638@marlin.nosc.mil>

>
> Bren-Tronics, Inc
> Michael Roamer, VP Marketing
> 10 Brayton Court
> Commack, NY 11725
> Phone: 516-499-5155
> Fax : 516-499-5504
>
> While on the battery subject I found this one:

The Nicad Lady
PO Box 654
Wildomar, CA 92595
909-678-0943
909-678-0065 fax

The NICAD Lady is Grace Frisk, N6WPA. My original contact was to find batteries for my PRC-77s. I sent up a sample for her to eyeball...Grace called back then faxed that they could do a rebuild but sealed Mil, NOS, batteries were available for \$1 to \$2 each. What is available are Ray-O-Vac BA-4386/PRC-77 magnesium batteries.(I have the spec sheet) These boogers will work with the PRC-25 also. I didn't ask about the availability of other Mil batteries but it seems one of her associates bought up a grunch of surplus stock thats sealed for a 25 year shelf life. Units carried mid '80s dates. Might be worth a call.

Ed Zeranski ejz@marlin.nosc.mil, work
ezeran@cris.com home
Wooden Boats, Tube Receivers, Rusty Old Trucks, The Good Stuff!

This is a private opinion or statement and is nobody's fault but mine. No person, employer, or govt. should try to take credit for it!

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: CW Xtals
Message-ID: <Pine.GS0.3.93.961115063837.3054A-100000@uhunix3>

Just a little after CW Crystals went out of business the following notice appeared:

> ANNOUNCEMENT:
> Sept. 11, 1996
> From: PHOENIX CRYSTALS

> 1714 North Ash St.
> Nevada, Mo. 64772
> Phoenix Crystals is commencing the manufacture of crystals targeted
> specifically for the radio amateur market. We plan to have AT-cut
> hermetically sealed plated crystals available within the next 30 to
> 60 days for the various amateur bands. Startup plans are to provide
> 80, 40 and 30 meter crystals on a 10 to 14 day shipment after
> receipt of orders.
> Tentative pricing will be approximately \$4.95 each in single
> quantity. Sealed plated crystals will provide much better quality and
> long-term performance than the older FT-243 style crystals, and we
> plan on making these available in several holder styles.
> John R. Morris
> Phoenix Crystals
> 1714 North Ash Street
> Nevada, Mo. 64772
> phone: 1-417-667-6179 (Note: daytime phone is answered by message
> recorder. Mr. Morris can usually be reached after 6:00 PM CST.)

..so all is not lost in regard to an xtal maker targeting the amateur market.

Jeff KH2PZ / KH6

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: dma@IslandNet.com
Subject: Re: DISCRIMINATOR QUESTION (SX-42)
Message-ID: <m0vOD2V-0006edC@mail>

Much cut out of John Sehring's Post:

..

>Basically the primary of the detector's transformer is tuned for max at the
>center of the IF bandpass, at the IF freq. (but not always, depends on the
>kind of FM detector used).

>

>The secondary is tuned to give zero volts DC output from the detector (the
>two detector 'halves' are then balanced). You'll hear the background noise
>drop a lot if you're using an alignment signal that's fairly weak, i.e. is
>not strong enuf to saturate the limiters.

>

>It may be necessary to go back & touch up the primary so that the curve is
>symmetric. Tuning equally above & below the center freq should give equal
>voltage.

I've just finished restoring an S-36 to life. The trickiest part (other than

all the @#\$\$%^ micamolds that had to be replaced) was the alignment of the discriminator.

I tuned the i.f. in accordance with the manual - just maximum output at the audio output (receiver set to AM) with an AM modulated 5.25mhz signal at the mixer grid. No problems here at all.

The manual's instructions for aligning the discriminator transformer were consistent with John's suggestions: receiver set on FM, 5.25MHz AM modulated signal at the mixer grid. But the first time through I ended up with a lot of distortion when listening to an fm station.

The manual stressed the critical nature of the secondary transformer adjustment, so I obsessed over that. But the problem was the detector symmetry, as John suggests. Just peaking the primary gave a very non-symmetric curve. The manual had a tedious 1940s style iterative approach to correcting this problem. After playing it their way for quite a bit, I stuck a sweep generator on so I could see what was happening. I quickly brought the primary to the correct spot, while keeping the secondary set for zero at the centre frequency. Bingo - no distortion! Drift, yes - but this is a 1940s receiver after all! The primary adjustment was every bit as sensitive as the secondary, and very important to the distortion level.

I also found that removing my socket extender that I had on the discriminator tube threw things off a bit, and putting the receiver in it's case did as well. However, the final tweaking was easy - I connected my signal generator to the antenna leads, AM modulation. Adjust the receiver frequency (set to AM) for maximum audio. Switch receiver to FM and carefully adjust receiver frequency for minimum audio in between the two audio peaks. The discriminator secondary can then be checked to be sure the "minimum" is as low as it will go. Then move the signal generator frequency 15kHz on one side of null, then 15 kHz on the other side, and adjust the primary until these amplitudes are the same. As the adjustment was almost correct already from setting it up with the sweep generator, this turned out to be easy and very accurate. I could have put the sweep generator back on, but it would have taken more time to do that, given how close the adjustment already was to being correct.

I'm actually quite pleased with how this Halli sounds. I have a Clarion sand-state car radio on the bench right now that actually has a bit more distortion. Trouble is, I can't even find the discriminator transformer - assuming the Clarion has one, so don't even know where to start. Long live tube gear!

Jan Skirrow, VE7DJX

dma@islandnet.com
Duncan, British Columbia

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: discriminator question
Message-ID: <199611150329.UAA29623@netcom10.netcom.com>

As Rodger Singley discourses

>

> I am doing some final "touch ups" to an SX-42 and I have a question on the
> FM detector. In the FM mode, there are two proper tuning spots either side
> of center. I have never used an FM receiver with this particular type of
> detector, however I feel that it seems to be operating as a slope detector
> instead of a discriminator. Tuning of the secondary of the discriminator
> xfmr does change the frequency at which the undistorted audio is received,
> but it still exhibits the "double spot" tuning with severe distortion tuned
> on the nose. Dual trace scope display of the plate signals of the 6H6
> indicates two signals of equal amplitude which are in phase and tuning
> either side of center causes a decrease in the amplitude of both. Any
> comments and help on this discriminator stage are appreciated.

>

As I recall the SX-42 uses a traditional 10.7 Mhz IF followed by a
limiter and Foster-Seely discriminator. Setting these up is fairly
simple. You'll need a fairly accurately calibrated signal generator and
a vtvm.

To set the IF's, use a low signal level. Probe at the the limiter
cathode, and set the IF's for peak output. Keep the signal below full
limiting, as this tube will saturate fairly quickly.

With the same low signal level, AM modulated, tune the discriminator
secondary for the null, which is quite sharp on most sets. Offset it
slightly and tune the primary for maximum output. Probe the
discriminator output (in front of the blocking cap that feeds the
audio to the audio amp). Then retune the secondary to the null. This
should give 0 volts DC at the discriminator output. Raise the signal
level at the generator and swing the frequency back and forth, noting
the frequencies which give maximum + and - output. If you've centered
the IF's and the discriminator primary, you'll get equal deviations
for maximum output. Total bandpass should be 200 Khz or more (100 on
either side, before the DC level shift becomes non-linear).

An alternative method, given by Magnavox, is to tune up the IF's.
Then, with a probe on the discriminator output, shift the signal
generator up 75Khz and peak both discriminator coils. Go back to the
center (10.7 Mhz) and check that output is now 0 volts. The +/-
75Khz. points should give equal +/- voltages.

On an S-36A, where you have sharp/narrow settings for the IF, and can use the AM detector, first peak the IF's at 5250 Khz (the IF frequency in those sets). Then, switch to the broad setting, and retune the signal generator for maximum output. This will be slightly off from 5250---what you want to get is the center you are going to use for FM. Then adjust the discriminator transformer. Once again, you want equal output for equal deviation from center either way. The S-36A IF's are quite narrow, and you will get linear output over only about 160 Khz total deviation. Also, on the S-36A (and any other pre-1947 setups), check the time constant in the audio circuit. If it is over 75 Khz, reduce the capacitance value to give 75 Khz. Early sets (prewar and early postwar) had 100-130 microsecond time constant filters, which kill high frequency response on current-spec FM broadcast signals.

If you can't get a good probe point in the limiter circuit, rig up a simple AM detector. A 100 pf. cap in series with a 1N34 or 1N914, run from the limiter grid to ground, will give good DC indications with a peak-reading VTVM, like an RCA WV-series Volttohmyst. Shunt the diode with a megohm or two, to give stability.

As I recall, Langford-Smith, in Radiotron Designer's Handbook, 4th edition, talks about setting up 10.7 Mhz. IF with Foster-Seeley discriminator for around 200-220 Khz. linear response width. If your setup is narrower than that, it will be fussy with oscillator drift. If you do not get the discriminator secondary set for 0 volts at the center of the IF tuning, you'll get distortion in the audio and/or poor sensitivity.

An alte

--

=====
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
=====

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: aculbert@pps1-po.phyp.uiowa.edu
Subject: DRAKE 2-B on TOP BAND
Message-ID: <199611152149.PAA18562@ns-mx.uiowa.edu>

Yes, the Drake 2-B COULD be made to play on the top band. It required the purchase of the 2-LF.

This little gem converted low frequency signals UP to the ten meter band.

To use it, one had to remove the 2-AC 100 kc. calibrator and this unit plugged into the same 4 pin plug. The unit has an RCA connector for connecting to the appropriate low frequency antenna.

The trick today is to find one of the elusive 2-LFs! Yes, I have one, No, I won't part with it!

Al, K0AL

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: BEN NOCK <106312.1035@compuserve.com>
Subject: Drake set 2B
Message-ID: <199611151441_MC1-BF7-8F91@compuserve.com>

Subject: Drake 2B ?Question?
Message-ID: <199611102029.0AA03295@mail.ionet.net>

Never had this receiver or any Drake. Does the stock 2B play the entire 10Meter band as is or does one have to obtain custom crystals to make it work? Does it have any blank positions on the BS for other bands like 30Meters or 160M? How would you rate it as a compact unit as BA's go?
73/Mike

-----reply-----

As far as I'm concerned, its a great little set, really compact. It has 28-29.7 coverage, I guess by now, most sets will have been rocked up at some time. and there are 5 spare 600khz slots in which you can put what you like, including top band !, with just a bit of jigerry pockery at the front.

Just a reminder, I'm looking for the Q multi and spkr if anyone has one. Thanks.

Ben G4BXD MILITARY WIRELESS IN THE MIDLANDS

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: Stanley Wilson <microres@crl.com>
Subject: Re: Drake set 2B

Message-ID: <Pine.SUN.3.91.961115121734.28951A-100000@crl6.crl.com>

Top Band ?????

My manual says 3.5 mhz is the lowest frequency ? de stan ak0b

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996

From: MODSTEPH@ACS.EKU.EDU

Subject: Excellent manual copy

Message-ID: <01IBU09CRDLE000KZM@ACS.EKU.EDU>

I just got my copy of the HQ-180 manual that Shaun Merrigan put together. It took a bit of time, but well worth it. It is an EXCELLENT piece of work: as he stated, it is not a copy but in effect a re-print, and a first rate piece. Thanks, Shaun, and keep up the good work!!

73, Al N5AIT

modsteph@acs.eku.edu

Allan Stephens

Richmond, Kentucky

LOOKING FOR (WTB): Morrow RTS-600S ps/spkr

Multi-Elmac M-1070 ps

Harvey-Wells APS-50 ps

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996

From: JBurgwynjr@aol.com

Subject: Re: Excellent manual copy

Message-ID: <961115190402_1217060125@emout15.mail.aol.com>

I second all of your comments about Shaun's work My manual was excellent.
John

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996

From: rlahlum@juno.com (Ross J Lahlum)

Subject: FS: Books - lost replies

Message-ID: <19961115.011917.3638.1.rlahlum@juno.com>

A few people responded to this post, but I lost their messages. Please try again!

Thx es 73,

Ross (&sorry for the bandwidth!)

No response to my posting, so I will try again with reduced prices (I will also consider offers):

Gotta make some room on the bookshelf, so I'm reluctantly letting these go!

Radio & related books for sale:

Ghirardi, Modern Radio Servicing, 1st ed., 1935, Excellent cond.
\$40.00 - now \$25.00

Langford-Smith, Radiotron Designer's Handbook, 3rd ed., 1941, VG cond.
\$30.00 (note this is not the big red one, but the earlier, thinner black book) - now \$20.00

Cooke, Mathematics for Electricians & Radiomen, 1st ed., 1942, Excellent cond., \$25.00 - now \$15.00

Protter, Calculus With Analytic Geometry, 1963, Excellent cond., \$20.00 - now \$10.00

Prices do not include shipping

Ross KB9JJR
rlahlum@juno.com
Mt. Prospect, IL 60056
----- End forwarded message -----

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: Tom.Daley@530.gigo.com (Tom Daley)
Subject: fs: swan gear
Message-ID: <c8b_9611141957@gigo.com>

hello ba people i have more junk to sell or trade. i am looking for gonsets ! all below plus shipping

!! want laff-at-it ha-750 !!

1. swan 350 hf ssb transceiver - good condition with full output ! works great with good front panel/knobs/meter/dial except main dial insert scuffed from use. with power supply/speaker (w/extra electrolytics parallel chassis mounted multi section can ??) no mic but has manual copy ! some crunge/dust on chassis \$155
2. swan 250c six meter ssb transceiver - good condition with full rf output ! works good with good front panel/knobs/meter/dial ! plate ma meter not working however s-meter mode functions ok

with power supply (no speaker) no mic with manual copy \$145
3. swan tv2 2 meter transverter - good condition/complete - dusty
front panel/knobs/meter in good shape. chassis has crunge/dust
set up for 50mhz if (mates w/250c) no manual untested \$95

dont be shy with offers or trades ! located in sacramento 73 tom

--

: Fidonet: Tom Daley 1:203/530 .. speaking for only myself.

: Internet: Tom.Daley@530.gigo.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996

From: John Wieder <jwieder@gunnison.com>

Subject: Ft Wayne Fest

Message-ID: <199611151915.MAA00562@gunnison.com>

Since I have seen a number of postings about this I thought I would appeal to those of you going to this hamfest that I am looking for a Heath DX40 to reconstruct my novice station. If anyone happens across one that is in good shape physically and electrically without modification I would be happy to work out a deal with you. Thanks. 73 John WA0JYJ jwieder@gunnison.com

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996

From: "Allan Fritsche" <fritsche@msn.com>

Subject: Funny Story, Maybe?

Message-ID: <UPMAIL03.199611150139450385@msn.com>

Hi Gang, Long time , no talk.

Trying to get everything in shape for Winter the other nite and I noticed that my old , faithful Signal Generator, a Heath SG-102 was looking pretty bad.

So I said to myself, Self, I built this thing about 1972 and I have never cleaned the knobs or panel. AHA, a quick project.

So Naturally, took off all knobs and used my favorite BA cleanser(WINDEX), Sprayed the *\$%\$ out of them and put in a coffee can of Hot water. I said I'll let them soak for a while.

Next sprayed the front panel with WINDEX, CRAP, Gray and green and you name it colors running everywhere. STOP. Immediately dosed the thing in a water bath and all seems well. Waxed the little sucker's front panel and it looks like NEW, but thats not my story. Got the Knobs out of the can and let them dry for about 10 minutes.

Waxed all 5 of the little knobs(Now the unit is worth at least 5 Bucks at a local hamfest). Checked calibration with yet another project, my old Heath counter and again , All Seems Well. Put all the knobs back on and this guy looks like NEW. O.K. can go to bed and forget about it. All the little pointer marks are perfect.....

Next morning I get up for work and after letting the Dogs do their thing, I went to admire last nites handy work. WHAT THE HELL.
All the little black pointers where pointing to the core of the Earth. Ive never seen anything like it. As I got closer to the little guy, I blew breath on one and the metal insert fell out of the knob. Somehow I had loosened all the glue behind the Silver inserts, Dam it was the weirdest thing Ive seen with a piece of gear. It was like a magnet attracted them all to the South Pole.
Anybody else experienced this one?
Your Friend Al
fritsche@msn.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: jproc@bellglobal.com
Subject: RE: Funny Story, Maybe?
Message-ID: <Chameleon.4.01.2.961115000205.jproc@>

>It was like a magnet attracted them all to the South
>Pole. Anybody else experienced this one?

Al,

Maybe the devil lent you a hand in restoring the unit while you were asleep :-)

Regards,

Jerry Proc VE3FAB
E-mail: jproc@bellglobal.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: Mike Flicinski <k2uxe@ibm.net>
Subject: GenRad Freq Deviation Meter Model 681B
Message-ID: <328CFE14.16C6@ibm.net>

When I was at the Belton, TX hamfest in early October I obtained a General Radio Frequency Deviation meter Model 681B. It has a single zero-center meter on the front calibrated in Plus/Minus 30 cycles per second. There are no other controls. Parts of the cabinet appear to be constructed of mu-metal but I could be mistaken about that.

This unit is from the recent SK estate of Eidson Crystals in Temple, TX.

I think that there must be more to the test setup to net crystals with this unit but I only got the part with the meter in it. It is in a 19" rack cabinet and is in beautiful condition.

If anyone is interested in re-uniting this with its counterpart components please contact me. I will make it available on most reasonable terms.

73,

Mike K2UXE

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: W2CRS@aol.com
Subject: GONSET II power connections, DISREGARD REQUEST
Message-ID: <961114202549_138662477@emout02.mail.aol.com>

Sorry, but I finally found my original Gonset II manual from 1957. Where was it? With my log books from 1957, natch.
Hope to have a Gonset II fired up in a few hours!
Doug W0AH

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: wbird@dns1.ala.net
Subject: Heath Wanted
Message-ID: <M.111596.125055.88@ala.net>

Am interested in (1)Heathkit Hs-24 speaker & (2) HW8 QRP w/pwr supply.
Willis T.Bird W4WUL

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: Richard Hager <rhager@millcomm.com>
Subject: Re: Help! Need Precision 612 Tester Settings
Message-ID: <328BBF6B.11EF@millcomm.com>

Bob Marsh wrote:

>

> Hi all,

>

> I managed to borrow a Precision 612 Tube Tester with the adaptor from a
> friend. I can't find any listings in the roll chart or supplements for
> an OA2 tube (It's also listed as a 6073).

> Can anyone tell me what the settings are for this tube? --

Bob, this is just a simple voltage regulator tube, just like a zener diode. You can easily test it yourself with nothing but a 200v/100ma DC supply, a couple clip leads, and some resistors.

Basically, you put a voltage across it higher than it's rated limiting voltage, but be sure to apply this voltage through a resistor that will limit the current to within the tubes specs.

Bottom line is, if it regulates within spec, it's good, if not, it's bad.

Specs should be readily available in RCA tube book, or similar.

Two things: Vary the current and make sure it stays within the rated voltage range and is stable, not jumping around in either V or I.

Second, you might want to track it over a period of time, as it heats up. A storage scope would be great in this application, but a pencil, paper, and voltmeter will do the job.

Hope this helps!

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I just like to make things" So... -
+ please call Ah-ha! directly for CNC info -
+ <http://www.gdic.com/ahha> email: ahha@gdic.com -

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: vancleef@netcom.com (Henry van Cleef)
Subject: Re: Help! Need Precision 612 Tester Settings
Message-ID: <199611150352.UAA02651@netcom10.netcom.com>

As Richard Hager discourses

>
> Bob Marsh wrote:
> >
> > Hi all,
> >
> > I managed to borrow a Precision 612 Tube Tester with the adaptor from a
> > friend. I can't find any listings in the roll chart or supplements for
> > an OA2 tube (It's also listed as a 6073).
> > Can anyone tell me what the settings are for this tube? --
>

> Bob, this is just a simple voltage regulator tube, just like a zener
> diode. You can easily test it yourself with nothing but a 200v/100ma DC
> supply, a couple clip leads, and some resistors.
>

Specs for 0A2 are a firing voltage not over 185 volts, sustained
voltage drop 150 volts from 5-30 ma. This is the same as the larger
octal OD3, except for pin connections and 30 ma. max current rather
than 40 ma.

I personally wouldn't bother with a tube tester. If the thing fires OK
in the circuit, and maintains about 150 volts, it's working. Make
sure the feed resistor has not changed value substantially---if the
tube gets dim as the other tubes in the set warm up, or goes out, it
is probably being pulled down below 5 ma.

If the set works OK on the bench, but gives trouble when inside its
cabinet, put a light bulb inside the cabinet. Glow discharge devices
(neon bulbs, too) need a "kick" from light to start reliably. Some of
them had some radioactive "kick" added. So far as I know, this wasn't
done with VR tubes. You can check for light by turning the radio on
in a dark room and seeing if there is pilot light glow falling on the
tube; also, whether it starts reliably.

--

=====
Hank van Cleef
E-mail vancleef@netcom.com or vancleef@tmn.com
=====

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: klaudon@PICA.ARMY.MIL
Subject: HF acid safety
Message-ID: <9611151711.AA24246@batdd6.pica.army.mil>

Barry Ornitz, Jim W8ZR and others have issued warnings about using
HF (hydrofluoric acid) for hobby use in crystal etching.

>I don't want to sound like your mom, but I'd recommend nobody except
>professionals mess with hydrofluoric acid. It's some of the nastiest stuff
>in the world. I remember reading a story years ago about someone who
>picked up a rag that had been moistened with HF. Infomed that the rag was
>contaminated, the person remarked that the HF felt slightly oily but not
>terribly corrosive. He then washed his hands carefully and all seemed well.
>A few days later he had to have both hands amputated. Don't know if the
>story is true or not, but I always think of it when I'm tempted to mess
>with the stuff.

>

>Jim W8ZR

I am very happy that knowledgeable folks like Barry have taken the job of being boatanchors list chemistry experts, and particularly, chemical safety experts.

At least 3 years ago, I posted some warnings when folks began to speak about constructing homemade vapor degreasers, for home hobby use. At the time, I was lambasted publically, lumped in with a mythical class of villians called "chemophobes", and was openly insulted by a reference to my e-mail address as being one which ought to have indicated some degree of scientific knowledge (which the writer implied that I did not have, judging from my comments and obvious "phobia"). In fact, that epithet was invoked again just recently (although not directed at anything I had posted).

I did not respond publically to these insults at the time, or in the several years since, because the awareness that I had intended to cause, did indeed arise! A knowledgeable expert did indeed arise and assume the role that I had intended to create (not necessarily fill myself).

My ego is not important here. Helping one's fellow to avoid injury, and to achieve happiness in his life, is.

I maintain to this very day, that insufficient awareness of chemical safety (that is, true chemical safety, not enviro-nazi-politically-correct chemical safety) is still a problem among some tinkerers.

My latest experience to confirm my view - my neighbor is a public school maintenance guy. A very competent jack-of-all trades, Black Seal certified, full HVAC certified, top notch diesel mechanic, etc.. Oh yes, he's a no-code Tech, too, but that's another story. Well, I walked around to his house about a month ago, where he was working on one of his many junkers in the front yard. He was trying to get the battery charged. It was low on fluid. As I was chatting with him about it, with his 5 yr old daughter, kitty and German Shepard all frolicing on the lawn, he nonchallantly picked up a gallon chemical reagent bottle and said, "If this don't juice it up, then it's dead for sure!". It was a partially-full gallon bottle of concentrated sulfuric acid, label and all!

Needless to say, I calmly stepped back a few steps, and asked him to wait a minute or two! He got it from the Chemistry Lab at the school he works at. He says they do this all the time in the maintenance shop - if they have a really dead battery, they go up to the chem lab, "borrow" some of this here acid, "water it down a little", pour it into

the battery and wait! Really rejuvenates it, at least for a few more months, at which point the battery really dies dead.

So, he informs me, the acid in that bottle really is not concentrated, but already watered down. Without giving the game away, I asked him how he dilutes the acid. He gave the expected wrong answer - "Oh, we just pour water from the tap into a half-full bottle!". (One always adds ACID to WATER, not water to acid, which can cause splattering and therefore injury. ANYONE who has to work in a chem lab or shop is taught this on day 1. It's about as basic as you can get.)

We also had a fun chat about how concentrated acid is viscous, fumes, is interesting to play with in the bottle, etc., and how he has noticed this with some of the OTHER concentrated acids in the lab that he and his buddies have played with, after school was out.

Oh, and I almost forgot to mention - this was a pleasant warm day, and he was clad in his usual tank top, shorts, and was barefoot. While handling a car battery and a half gallon of (still-strong) acid.

Final story, this time ABOUT HF (Hydrofluoric acid, not high freq!):

Earlier this week, or late last week, a sanitation worker in NYC died as a result of chemical burns! He and his partner had just dumped a garbage can into the hopper of the truck, and as the crusher did it's job on the load, a container in the trash burst, spraying the two workers. The container contained HF. Both garbagemen were burned. One died within an hour or two, in the hospital, and one lived. We cannot imagine the agony of the victims and the horror of their families.

The news report indicated that the acid had probably been placed in the trash erroneously by some local manufacturer or business. The police did not think that it was placed intentionally. In other words, another example of just plain STUPIDITY in basic chemical safety and disposal.

I am very pleased that we have the proper expert advice on this list, and I feel strongly that my initial wake-up call is what got that expertise to be shared openly. Lots of folks ask questions about chemicals and materials, and info is provided.

Sorry for the long, tangential-topic message. I had to say what I said.

Any responses, or further insults, please do privately.

Let's be careful out there! 73!

Kalman Laudon, W2ES CW, QRP, Hollow State Radios, and CW!!
<klaudon@pica.army.mil>
previously - AA2UQ, WD6CZI, WA1SUF
"Get your facts first, then you may distort them as you please." - Mark Twain

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: Joe Serocki <JSEROCKI@allstate.com>
Subject: HF Boatanchor sale
Message-ID: <s28c8995.040@allstate.com>

Gotta get rid of a bunch of stuff. Was using it for novice classes and club stations, but the kids lost interest.

Best offer on it. Shipped from Chicago.

Contact me at 800-366-2958 x27119, or here. Prefer a fone call, and it's free anyway.... :)

Ten Tec Century 21. Good condition, dial slightly warped, one non-original knob.

Ten Tec Century 21. Very good condition.

Heath HW16 CW/AM transceiver with HG10 VFO. HW16 needs 6CL6 tube.

Heath HD1410 electronic keyer

Swan 260. Works perfectly on 80, 20, 15. Does not work on 40, 10 in SSB mode.

Drake B line. Works well. Missing RF gain control, RCVR/XMTR interconnecting cable.

Knight T60 80-6m CW/AM XMTR, operational condition unknown.

Hallicrafters HT40 80-6m CW/AM XMTR. Operational condition unknown.

Hallicrafters HT-18 CW/AM exciter. Operational condition unknown.

Hallicrafters SX-28 RCVR. Main tuning dial slips, works well otherwise.

Zenith TransOceanic tube *portable'. Probably a parts radio, unless you really want to work at it.

ICOM IC-740. Needs new finals, works well otherwise.

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: n6nae@ix.netcom.com (Richard Humphrey)
Subject: Is this a T-368 exciter?
Message-ID: <199611150213.SAA20149@dfw-ix9.ix.netcom.com>

I bought a box of 'stuff' at the last Livermore swap. I believe it assembles into a T-368 exciter unit. But there's more. Maybe some of you heavy iron experts can help identify what these pieces are.

The part I think I understand is a chassis with a grey front panel. Tunes 1.5 to 20 megs in 4 bands, each band has its own mechanical readout behind a shuttered dial window. Behind the panel is a 70H9 PTO and a chassis with four tubes, 3x 6AH6 and a 6000. This chassis is tuned with a rack and coil slugs. (It came with a NIB TungSol 6000 tube which I've never seen. Looks identical to a 5881. The box is labeled Wagner Electric Co., TungSol Division. Date 10/70, for those of you tracking who made what when.) There's no manufacturers name on anything, although the base plate is stamped MFR 14241. Who's 14241? The PTO has a decal on it which is mostly gone, but I can make out part of Collins. May be a license sticker.

OK, so that part is a T-368 exciter, right?

The extra bit is a spare chassis which I thought went with this unit. It has the same general layout, and looks like it could mount in place of the chassis with the 6000 tube, but there are some differences. The tube lineup is 6AU6, 6AK6, 6AK6, 5763. On the back is a decal that says 'Exciter Assy. Collins No. 506 1588 006. St. Carl. No. 655288'. Who is Saint Carl? Other differences are: the cable has no leads for the PTO, and there is only one BNC jack. No other jacks or a relay. There's some component layout differences too.

So, this chassis is something similar from Collins, but it ain't part of a T-368, right? Anybody have a guess what system it came from?

Richard
n6nae@ix.netcom.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Benjamin D. Hall" <BDHall@GHGCorp.com>
Subject: Re: Is this a T-368 exciter?
Message-ID: <328CE9E0.3760@GHGCorp.com>

Richard Humphrey was talking about a peice of equipment that may have been a T-368 exciter:

> of you tracking who made what when.) There's no manufacturers name on
> anything, although the base plate is stamped MFR 14241. Who's 14241?

Sounds like a Cage Code to me. Any of you military contractor types out there have access to a Cage Code book? (I wish I had access to the mil-spec database and cage code database like I had when I worked for Eaton...)

73,
Ben

bdhall@ghgcorp.com (someday I'll edit my sig file so I can stop typing this everytime)

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Ray L. Mote" <rmote@rain.org>
Subject: K2A0Q wants RU-18 manual
Message-ID: <Pine.SUN.3.95.961114234519.3481F-100000@coyote.rain.org>

Mel Stoller, K2A0Q, in Rochester NY needs an RU-18 manual or copy. Can anyone help? His home phone is (716) 671-0776. Unforch, he's not on Internet and called to ask for help.

Thanks! Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Paul Bock" <pauboc@smtpblink.pulse.com>
Subject: Manual for Knight KG-625 VTVM
Message-ID: <9610158480.AA848081117@smtpblink.pulse.com>

Gang,

Just got a spiffy, near-mint KG-625 VTVM with both probes but alas! - no manual. Hi-Manuals doesn't list one, either.

Anyone out there willing to make me a copy of same?

73,

Paul, K4MSG

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: NavRad41@aol.com
Subject: Military & misc. manuals FS
Message-ID: <961115003716_1648523240@emout13.mail.aol.com>

Hello to all

The following is a list of manuals that I have for sale.

First reply gets the manual. If multiple requests for same manual I'll keep a request list.

I'll hold the manual for 7 days, then it's back up for sale.

Shipping is extra.

ARC-2 & 2A Handbook Overhaul Inst. NAVWEPS 16-30ARC2-13 102pgs. \$15.00
ARC-21 Preliminary Service Handbook IB-39568-SE 200+ pgs. \$15.00
ARC-21 Handbook of Operating & Service Inst. T.O. 12R2-2ARC21-1 400+ pgs \$15.00
ARC Type 12 w/UHF supplement. Inst. Book ARCI B-12-2 103pgs. \$10.00
ART-13 Trans. Handbook Maintenance Inst. 12R2-2ART13-2 200+ pgs. Qty-4 \$25.00ea
AR-8510 Rec. RMCA 15-650kc NAVSHIPS 94335 31pgs \$10.00
AR-8516 Rec. RMCA 80kc-30mc NAVSHIPS 94339 48pgs \$10.00
BC-375-E Trans. Op. & Maint. T.O. 08-10-139 88pgs. \$10.00
Collins 432A-1 Trans. 2-30mc 2.5kw Inst. Book 200+ pgs \$15.00
Globe King 500A Trans. 17pgs. \$20.00
GPR-90 / R-840 Rec. TMC Inst. Book T.O. 31R1-4-36-1 43pgs. \$15.00
GPR-90 / GPR-90RX Rec. TMC Inst. & Parts breakdown T.O. 31R2-4-155-1 71pgs \$15.00
R-1051/URR Rec. Vol.1 NAVSHIPS 0967-970-9010 200+ pgs w/several foldouts \$25.00
R-274/FRR (SX-73) Rec. TM11-897 104pgs. \$15.00
RAK-7 Rec. IB-38219-e 75pgs. NOS \$20.00
RAO-3 & 4 Rec. NAVSHIPS-900,359-IB 80 pgs \$15.00
RAO-5 Rec. NAVSHIPS-900,489-IB 94pgs. \$15.00
RBA-7 Rec. NAVSHIPS 91559 80pgs. \$15.00
RBB/C-5 & 6 Rec. NAVSHIPS 91469 90pgs photocopy \$15.00
RBU, RBV, RBW, RCX Panadaptors Spare Parts Catalog NAVSHIPS 900,288 38pgs \$5.00
SCR-506-A (BC-652/653) TM11-630 166pgs \$15.00
SCR-508/528/538 (BC-603/604) TM11-600 237pgs \$20.00
SCR-608/628 (BC-683/684) TM11-620 194pgs. \$20.00
SRR-11,12,13 Rec. NAVSHIPS 91875-A Inst. book 200+pgs \$20.00
SRR-13-A Rec. NAVSHIPS 92977 48pgs \$10.00
TCK-4 & 6 Trans. GEI-18806 Preliminary 81pgs \$20.00
TDQ Trans. NAVSHIPS 900.474-IB 289pgs \$10.00

TV-3B/U Tube Tester NAVSHIPS 91747 has obsolete T.T. data \$15.00
TV-3C/U Tube Tester NAVSHIPS 92193 " " \$15.00
TV-10/U Tube Tester NAVSHIPS 93021 " " \$15.00

Manhattan Electrical Supply Co. (MESCO) Catalog NO. 29 from early 1900s
264pgs filled with all sorts of early electrical equip. original \$25.00

Contact:
Steve Finelli N3NNG
37 Stonecroft Dr.
Easton, Pa. 18045
610-252-8211
NavRad41@aol.com

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: lkayser@rideau.net (Larry Kayser)
Subject: More on the Demise of C-W Crystals
Message-ID: <199611151425.JAA03129@mail.peterboro.net>

Greetings:

Sandy and the Gang, someone really should try and see if they could pick up this small business. I am not sure of the veracity of a comment I heard during a CW qso on 7040 a few weeks ago, but a chap said that C-W Crystals had "several tons" of military crystals and he had enough stock of FT-243 crystals to last him for "several life times" etc. I do know, he enjoyed his work and took pride in his products. I had a broken crystal arrive here once and he very quickly sent a replacement, no questions asked.

He has two critical things going for him an excellent reputation and a good stock of raw materials that would be totally uneconomic to try and find today.

I sure hope someone picks up the business, if I was retired (and I am not) and not committed to something else (small hope of that it seems) I would try and buy him out myself.

Larry
va3lk / wa3zia

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Tom Taylor <ttaylor@Adobe.COM>
Subject: NC-300 debugging
Message-ID: <v03007800aeafd12636f5@[144.7.25.31]>

I've got an NC-300 that I've started working on. When I got bought it, it would receive no signals. That problem was easily fixed by replacing a bad 12AT7. The current problem I'm working on is a low level hiss or crackling noise that begins a couple of minutes after the radio is turned on. There are two stages of audio: half of a 12AT7 as a preamp and a 6AQ5 as the audio amp. I disconnected the preamp from the 6AQ5 and the crackling noise went away. Feeding an audio signal directly to the grid of the 6AQ5 sounds fine. I reconnected the 12AT7 to the 6AQ5 and the crackling returned. I disconnected the receiver's circuit that feeds the grid of the preamp (half of 12AT7). The crackling is still there, but at a lower level. There are no dirty volume or tone controls in the circuit at this point.

The radio probably has twenty paper capacitors. Besides the crackling noise, the radio seems to work pretty well. I'd like to figure out what the crackling noise is before throwing in the towel and replacing every single paper capacitor.

Any suggestions?

Thanks,
Tom N7TM

Tom Taylor
ttaylor@adobe.com

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: 4CX250B@miavx1.acs.muohio.edu
Subject: Re: NC-300 debugging
Message-ID: <v03007809aeb2820a8c03@[134.53.5.143]>

>I've got an NC-300 that I've started working on. When I got bought it, it
>would receive no signals. That problem was easily fixed by replacing a bad
>12AT7. The current problem I'm working on is a low level hiss or crackling
>noise that begins a couple of minutes after the radio is turned on. There
>are two stages of audio: half of a 12AT7 as a preamp and a 6AQ5 as the
>audio amp. I disconnected the preamp from the 6AQ5 and the crackling noise
>went away. Feeding an audio signal directly to the grid of the 6AQ5 sounds

>fine. I reconnected the 12AT7 to the 6AQ5 and the crackling returned. I
>disconnected the receiver's circuit that feeds the grid of the preamp (half
>of 12AT7). The crackling is still there, but at a lower level. There are
>no dirty volume or tone controls in the circuit at this point.
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>The radio probably has twenty paper capacitors. Besides the crackling
>noise, the radio seems to work pretty well. I'd like to figure out what
>the crackling noise is before throwing in the towel and replacing every
>single paper capacitor.
>
>Any suggestions?
>
>Thanks,
>Tom N7TM
>
>Tom Taylor
>ttaylor@adobe.com

Tom, in my experience, such problems are commonly caused by defective tubes -- frequently by tubes that check out okay on a tester. I'd try swapping your 12AT7 with yet another 12AT7. To verify that the problem isn't coming from the power supply, try putting 50 or 100uF across the B+ line (temporarily, with clip leads) to see if the crackling disappears. If the noise goes away, then suspect a pwr supply electrolytic. (You could also look at the pwr supply voltage with a scope. AC couple the scope and run the deflection sensitivity up to about 100mV/div to look for noise on the B+ line.) If the power supply checks out okay, then try replacing the cathode bypass cap on the 12AT7 (I'm assuming there IS a bypass cap-- I don't recall the specific circuit.). Another possibility would be the coupling capacitor tied to the grid of the 12AT7 from the preceding stage. Good luck!

73,
Jim W8ZR

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "David M. Nance" <dmnance@roanoke.infi.net>
Subject: Need advice on Boatanchors for Sale
Message-ID: <328D32E6.B6C@roanoke.infi.net>

Today I stumbled across three boatanchors for sale: Heathkit DX-100B (on knob missing), Hallicrafters SX-24 Skyriders Defiant and a Lysco AM-CW transmitter (Model 600?). They all look complete, are in fair cosmetic condition and obviously haven't been used in years.

The guy that owns them (not a ham) thinks they're worth a fortune although he has absolutely no interest in them or knowledge about them. I'm going to offer him \$100 for all three, as is, where is (but I'll duck after making the offer). He had a price of \$225 for the DX-100, \$200 for the SX-24 and \$125 for the Lysco. He's had these for sale for quite some time and I doubt he has anything in them. A friend of mine wants the SX-24 and DX-100. I'm particularly interested in the Lysco.

Does anyone have an opinion on what these are worth in their present indeterminate condition? They could all have burnt up transformers, etc. for all I know.

If he doesn't accept my offer and someone out in BA land is interested I'd be glad to put you in touch.

David
WB4SSE

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Joseph W. Pinner" <kc5ijjd@net-connect.net>
Subject: PRC-74 manual
Message-ID: <199611151422.IAA27666@dns1.net-connect.net>

I have had several EMail crashes and have lost most of my EMail for the last year.

I seem to recall that someone was looking for a manual for the PRC-74B or C.

There is an extra copy at the military museum which we can offer for \$ 25 plus \$ 3 shipping.

If anyone is interested, let me know.

73

Joseph W Pinner
Lafayette, LA
KC5IJD
EMail: kc5ijjd@net-connect.net

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Ronnie Hull <larebel@ms1.nwla.com>
Subject: R388 stuff needed`

Message-ID: <1.5.4.16.19961115061112.379ff3e8@ms1.nwla.com>

Hi again fella's

I need some of the little black escutcheon screws for the front of my R388. Also, was there a matching speaker for the 388, and where can one find a desktop cabinet for it?

thanks in advance

Ronnie - WB5AIA

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Ronnie Hull <larebel@ms1.nwla.com>
Subject: R388 Top Cover
Message-ID: <1.5.4.16.19961115054605.37d773a0@ms1.nwla.com>

Hi Ya'll

finally got my 388 working and aligned. Now, I need a top cover plate for it. Anyone got any suggestions?

Ronnie - WB5AIA
"Born to BoatAnchor"

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Benjamin D. Hall" <BDHall@GHGCorp.com>
Subject: Re: R390A meters
Message-ID: <328C5CDF.34F9@GHGCorp.com>

Pentti Haka wrote:

Hi Pentti, I'm cc:ing this to list as I think it is a listworthy topic!

> > and went meter shopping. Accoring to Hollow State News, I was
> > shopping for a 1 mA full scale 17 ohm meter for the Carrier Level
> > meter and a 250 uA full scale, 3360 ohm meter for the Line Level
>
> Interesting mail. I did some calculations of my own and arrived at
> following results: if the carrier level meter spec would be 1 mA 17 ohms,
> it would mean full deflection at 17 microwatts! I guess this is possible, but
> unlikely.

> Please check the figures; for the carrier meter, 1 mA at 170 ohms would
> mean 170 microwatts at full deflection, perhaps a more reasonable value.

The figures are taken from an article in the Hollow State Newsletter number 22, Spring 1989, from an article written by listmember(?) Dallas Lankford. Indeed, the article does state that the Carrier Level Meter is 1mA at 17 ohms. Actually, it says 17.7 ohms, which I rounded down, oops...

> You said your new meters are 200 uA, 750 ohms. This means that they
> should achieve full deflection at 30 microwatts - a quite sensitive
> meter.

And this is consistent with my results! I cannot get the Carrier Meter to deflect more than half scale, which makes sense because 17 microwatts stated by the specification Dallas wrote is about half of 30 microwatts sensitivity of the new meters. I'm going to stick by Dallas' figures...

> For the line level meter, assuming the original is 250 uA 3360 ohms,
> you could use a 3000 ohm shunt across the 200 uA/750 ohm meter and
> then put a 2700 ohm resistor in series with this. This would give you
> 3300 ohms total resistance and exactly 250 uA full-scale sensitivity.

Yep! The only problem is that the original meter is a VU meter, and therefore is an AC meter. Right now I am using just a series resistance of 15kohms with a small signal diode to make DC for the meter. Seems to work very well, but I will get my hands on a 3300 ohms resistor and a 2700 (if I can find them) and see what the results are and report them here.

> If you cannot find the correct meter specs elsewhere, please email and I
> will open up my R390A and measure the meters.

Actually, if you don't mind, I'd sure be interested in the specs of your meters!

Thanks and 73,
Ben

The lack of a signature on this message thanks to WinDoze95.
BDHall@GHGCorp.Com

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: DArney@gnn.com (Dan Arney)
Subject: Replies for HELP
Message-ID: <199611151445.JAA07417@mail-e2b.gnn.com>

Hi Gang I want to thank all of you who were nice enough to help me get back on line. The problem was not in any way related to Jack. It turns out tha a gum chewer at GNN punched in the wrong digit of my card, so it came up declined. Jack/processor turned it off due to having a lot returned mail.

I now have a hard copy of the confusing ways to get something from the server. I will have do a little more careful reading and go from there. Sorry for taking up the bandwidth but I just wanted to say thanks for the help.

I get a lot of good information, though some of the threads seem to keep unraveling forever.

Thanks Again.
Dan "Hank" KN6DI

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Bob Marsh <bmarsh@hicom.net>
Subject: SB-401 - More Info
Message-ID: <328C8321.7B21@hicom.net>

Hi all,

First, I'd like to thank everyone who replied to my prior posts. With all the help I've gotten on this rig, I think I'll have it on the air soon.

The culprit seems to be V-13 (6J11) and possibly V-12 (6D10). Did Heath have a particular reason for using these compactron tubes, or was it just economics? Anyway, I'll be getting them in a few days and we'll see what happens.

I've heard that the SB-301/401 pair was supposed to be a copy of the Collins S line rig. I'd be interested in hearing how they actually stack up to a Collins. A friend of mine is a big time Collins fan, and he's been trying to convert me. My only problem is cost. I'd love to have some Collins gear around here, especially the transciever (the KWM2A, I think - not sure about Collins model numbers)

Anyway, thanks again for the help. I'll let you know how I make out.

73 de Bob/KB2SGM

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Benjamin D. Hall" <BDHall@GHGCorp.com>
Subject: Shaun Merrigan manuals
Message-ID: <328CE815.77D@GHGCorp.com>

Just another plug for Shaun Merrigan's manuals: Received both the R-390A users manual and the HQ-180 manual from him this afternoon.

Until I looked really hard, I thought he accidently sent me the original R-390A manual, and the HQ-180 manual looks very nice as well.

Highly recommended.

73,
Ben

BDHall@ghgcorp.com

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: KWDouglas@aol.com
Subject: Re: Swan 500C
Message-ID: <961115090633_1551694728@emout13.mail.aol.com>

In a message dated 96-11-11 15:45:46 EST, you write:

> I'll feel better if someone tells me they have run 6LQ6's for
> years at "SWAN 500C full rated output" with no problems :-)

I have run my original set of 6LQ6's for years at "SWAN 500C full rated output" with no problems. There, I hope you feel better!

I bought my 500C used at least 16 years ago and I think it had the original tubes then. They are still in there. I can't say that the rig has seen lots of hours as it came out of a club contest station. Plus, I am not all that active. I do place a muffin fan in a foam rubber "chimney" over the cabinet in the area of the final to suck the heat out when ever I operate it in a contest. The old lady really gets HOT otherwise.

It still pins the 300 watt scale on the wattmeter on the lower bands and does about 250 out on 10 in tune mode. Make those tuneup periods SHORT, SHORT, SHORT. Make notes of the knob positions so you don't have to go back through the full tuneup when changing bands/freqs.

I paid \$137.50 for the 500C, power supply (bare brick only, no spkr/ enclosure), manual, & Turner 350C hand mike. (I remember the price exactly because a buddy and I made the club a package offer of \$275 for their twin 500C station and split it between us.

If it were up to me, 6146's would not be used to replace the finals.

I really like the old rig. Good luck.

Kent, K9JCR
KWDouglas@aol.com

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: k7yha@juno.com (Richard H. Arland)
Subject: The Eico 723 LIVES!
Message-ID: <19961115.050706.4407.9.k7yha@juno.com>

Gang:

Thanks to all the info received from the BA group, I was able to get the Eico 723 on the air tonite.

Had a xtal for 3730 kc so that was where I landed. Plugged the octal plug with proper strapping into the back panel and things took off!

Get about 40 watts output on 80. Going to go by one of the local OTs QTH tomorrow and look over his xtal stock in hopes of coming up with some BA and QRP freqs.

Running on the driver (about 2.5 ma of driver current) I get a flicker on the wattmeter, so that will make a respectable QRP BA transmitter, when times call for that sort of thing.

With any luck, I will be on 3579 tomorrow or Saturday evening and I PROMISE to use a straight key and not torture anyone with my sending skills (or lack of same) when using a Bug.

73 and tnx again to all who responded with info on this little rig.

rich K7YHA

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Jeffrey Herman <jherman@hawaii.edu>
Subject: TV movie: Titanic
Message-ID: <Pine.GS0.3.93.961114215251.13556C-100000@uhunix2.its.Hawaii.Edu>

CBS will be showing the movie Titanic Sunday evening. I sure hope that both the radio room and the radio comms will be presented in an accurate fashion.

Jeff KH2PZ / KH6

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: MODSTEPH@ACS.EKU.EDU
Subject: Re: TV movie: Titanic
Message-ID: <01IBVG785BEM00170G@ACS.EKU.EDU>

If you want accuracy in the radio room (not yet knowing what they will be doing with this version), see the British-made film, "A Night to Remember." Spark transmitter, use of "CQD," the "SOS" with exchanges with other ships accurate to what they SAY they are sending.

73, Al N5AIT
modsteph@acs.eku.edu

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: Richard Hager <rhager@millcomm.com>
Subject: URL problems
Message-ID: <328BB9B3.ED2@millcomm.com>

john wrote:

> I'm looking for many old and offbeat ham transmitters
> to restore and use.

..and included this address in his posting:

> Vintage Gear web page: <http://www.zynet.com/~johnb>

John: the file /~johnb is not valid. Not found on your server.

To others including web page URL's in your email/postings:

If you include the " http://" before the www.xxxxxx.com, then your URL will appear as a blue-highlighted active link for those reading your mail in Netscape (and probably other software as well). It's the 'http' that clues the reader software that it's a URL.

However: To WORK, It -must- be an exactly correct and fully complete URL. Someone posted to BA a couple days ago with a URL like this: <http:xxxxx.com> They left out the colon-slash-slash. The link came up blue and active, but the net choked on it because it was not a valid URL.

So, if you're including a web page addr in your sig, add the details and then everybody can go there instantly just by clicking on it.

By the way, the format that John used above is correct, but his server can't find that filename. Probably just a mis-spell or something at his end.

Richard Hager

+ Ah-ha! Design Group, Inc. -
+ Precision CNC Technology, since 1991 -
+ 612-641-1797, Fax: 612-641-8681 -
+ "I just like to build stuff" So... -
+ for CNC info, don't email me, call -
+ or email Ah-ha! directly. Thanks! -
+ www.gdic.com/ahha email: ahha@gdic.com -

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: Dave Hockaday <wb4iuy@ipass.net>
Subject: Re: URL problems
Message-ID: <199611151146.GAA24099@passport.ipass.net>

At 07:32 PM 11/14/96 -0600, you wrote:

>john wrote:

>> I'm looking for many old and offbeat ham transmitters
>> to restore and use.

>

>..and included this address in his posting:

>

>> Vintage Gear web page: <http://www.zynet.com/~johnb>

>

>John: the file /~johnb is not valid. Not found on your server.

Hi Richard and others. Try <http://www.mindspring.com/~johnmb/> for John's page. Also, have a look at my vintage links page at <http://www.ipass.net/~teara/vin.html> . Are there more Boatanchor links that I don't have??

73

73 de Dave Hockaday WB4IU
Youngsville, NC

wb4iuy@ipass.net

<http://www.ipass.net/~wb4iuy/>
<http://www.ipass.net/~hockaday/>
<http://www.ipass.net/~teara/>
<http://www.geocities.com/TheTropics/3349/>
<http://www.RTPnet.org/~fcarc/>
<http://www.RTPnet.org/~rdrc/>

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: owens@stout.atd.ucar.edu (Chip Owens)
Subject: UV-202 & old tube info wanted
Message-ID: <199611151623.JAA28353@atd.atd.ucar.EDU>

Greetings,

Looking for specs on the UV-202 triode. c.1921 (I think...)
Also, is there an on-line "tube manual" that this kind of info can
be found? Is there a reference that shows the very early tubes and
their specs? Any help would be appreciated.

Thanks,
Chip Owens, NW00

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: "Deane D McIntyre" <dmcintyr@acs.ucalgary.ca>
Subject: Re: UV-202 & old tube info wanted
Message-ID: <9611151658.ZZ605592@ds1.acs.ucalgary.ca>

In message <199611151623.JAA28353@atd.atd.ucar.EDU> writes:

>
> Greetings,
>
> Looking for specs on the UV-202 triode. c.1921 (I think...)
> Also, is there an on-line "tube manual" that this kind of info can
> be found? Is there a reference that shows the very early tubes and
> their specs? Any help would be appreciated.
>
>

Gerald F. J. Tyne's book, Saga of the Vacuum Tube, is a good source
of info for very old (pre 1930) tubes. It is available as a reprint
from Antique Electronic Supply.

Regarding the UV-202, Tyne states (pp.323-324):

"Power tubes were announced by RCA early in March 1921 and were listed in the RCA catalogue of Sept. 1, 1921. At the time of the announcement only the UV-202 was available, but the press release stated that the UV-203 would be available later in March, and the UV-204 would be on sale some time in April 1921."

"The UV-202 was similar in construction to the early UV-201 but larger-about 2 1/8 inches in diameter and 5 inches high. It was rated at five watts output, a conservative rating, and had a tungsten filament which took 2.35 Amperes at 7.5 volts. The normal anode voltage was 350 volts and the anode current 45 ma. It had an amplification constant [μ] of 8 and an output impedance of 4000 ohms. This tube was beloved by the amateurs, who built transmitters with as many as six UV-202's operating in parallel (Tilley, QST, Feb 1924, pp 37-38). The UV-202 was discontinued in 1925. It was replaced in the amateur field by the UV-210, and later by the UX-210, the latter having been announced on Sept. 1, 1925".

73, Deane D McIntyre VE6BP0
dmcintyr@acs.ucalgary.ca

(who wonders if he should risk firing up his "fifty watter" UV-203A)

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996
From: "Allan Fritsche" <fritsche@msn.com>
Subject: Viking 6N2 Manual repro's
Message-ID: <UPMAIL03.199611152351020325@msn.com>

Hi Gang , cleaning out the top drawer of my desk at home this evening. Found a envelope with a total of (7) Assembly, Calibrating and Operation manuals for the EFJ 6N2. I remember making them but forgot to again advertize them to the group. Nice copies, double sided. Asking 5 bucks a peice which includes mailing costs or a trade for a 6BZ6 or whatever. Let me know. Thanks Al
fritsche@msn.com

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: Don Reaves <dr@cei.net>

Subject: Virginia Haunts

Message-ID: <Pine.LNX.3.91.961115002245.4220A-100000@kc5jh.reaves.net>

Another business trip calls me to the Norfolk VA area next week. Any mandatory BA stops I should know about? I found a posting by Ed Zeranski mentioning the Bibliophile bookstore, Grand Junquetion mil. surplus and an Army Surplus type store. (Thanks, Ed!) Any other surplus places I should know about?

Don WA5BBS dr@cei.net

Wanted: ART-13 accessories

From boatanchors@theporch.com Fri Nov 15 18:12:38 1996

From: w4bld@juno.com (Robert B. Kerby)

Subject: WTB Morrow Twins

Message-ID: <19961115.142425.5071.3.W4BLD@juno.com>

Hello Gang - Does anyone out there have a set of Morrow Twins for sale. I will take either or both if you are of a mind to part with them. Thanks, Bob

Robert B. Kerby - W4BLD

Post Office Box 991

Waynesboro, VA 22980 - w4bld@juno.com - (540) 942-4356

I collect Morrow, Elmac and Gonset. I frequent the AM Swap Net on 3885 on Thurs

at 1930 and 3865 nets on Wed and Sat at 2000. Try the DX-60 Net on 7290 Sun at 1400!

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996

From: rhys@ix.netcom.com (Lawrence D. Wolken)

Subject: WTB: Cameradio Electronic Supply catalogs

Message-ID: <199611150137.RAA05127@dfw-ix4.ix.netcom.com>

Attention Western Pennsylvanians:--

There used to be a great electronic parts/ham radio/Collins distributor in Pittsburgh -- Cameradio Supply.

I'm in search of any of their old catalogs - about the thickness of an Allied catalog but smaller format. I would guess they went out of business in the late '70's (curious if anyone knows their history).

I'm willing to pay \$15-\$20 each depending on condition -- prefer late '50's or early '60's. Thanks gang.

From boatanchors@theporch.com Fri Nov 15 01:25:22 1996
From: George Humphrey <gah@koyote.com>
Subject: WTB: Heath Mics and Connectors
Message-ID: <199611150509.XAA27799@mail.koyote.com>

Heath Collectors and Dealers;

I need three mics for the Heath Twoer type of transceivers.
I also need three male and three female octal connectors that this equipment uses. Does anyone know where I might find these items? If I end up not being able to find the mics, does anyone know where I might find the mic connectors used on the Twoers so that I might convert some other mics?

Thanks for the help again,
73 George KC5WBV
gah@koyote.com

From boatanchors@theporch.com Fri Nov 15 12:17:34 1996
From: w2ec@VNET.IBM.COM
Subject: WTB: Navy RBA and RBB Receivers
Message-ID: <199611151640.KAA11079@uro.theporch.com>

Still looking for these two navy receivers. If anyone stumbles across either at a hamfest this weekend, I'd appreciate it if you would get the owner/sellers name and phone number to pass on to me, so I can check them out in case they don't get sold at the 'fest.

Thanks & 73, Ray W2EC, trustee for KB2ZRY, USS Cabot CVL-28 Memorial Station